

Baraboo Riverfront Redevelopment Report Card

Winter 2011



The Baraboo Action Model



Vandewalle 2006

The U.S. Environmental Protection Agency (EPA) defines brownfield sites as "...real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant." The Agency for Toxic Substances and Disease Registry (ATSDR) has collaborated with EPA in addressing brownfields and other land reuse sites, because these sites can be the source of potentially harmful exposures to hazardous substances or otherwise diminish the quality of life for nearby community members.

ATSDR has created tools and resources to assist communities interested in revitalizing brownfield or other land reuse sites. One such tool is a model to incorporate sustainable community revitalization into brownfield redevelopment. This model, the **ATSDR Brownfields/Land Revitalization Action Model** (Action Model), was originally developed through a 2007 pilot project in the 30th Street Corridor of Milwaukee, Wisconsin. Baraboo, Wisconsin is the second of many communities who have adopted the Action Model framework for community health assessment. In Baraboo, the Action Model was used to meet the City's objectives to monitor the health of the community living in or adjacent to a targeted redevelopment area.

The Baraboo "Development Community" – all those interested in healthy redevelopment – implemented the Action Model framework.

4 Steps to Action

The Action Model is built around four steps or questions:

Step 1: What are the issues in the community?

Step 2: How can development address these issues?

Step 3: What are the corresponding community health benefits?

Step 4: What data are needed to measure change?

Measuring Changes

Creating Public Health Indicators

The **Development Community** included:

The City of Baraboo
 The Sauk County Health Department
 Saint Clare Hospital
 Citizens for Waterfront Revitalization
 The Baraboo River Canoe Club
 The International Crane Foundation
 University of Wisconsin Extension
 Sauk County Development Commission
 Baraboo High School Wildlife Class
 Youth Environmental Projects of Sauk County (YEPS)
 Local residents
 Local merchants
 Vandewalle and Associates
 Ayres Associates
 Wisconsin Department of Natural Resources
 Wisconsin Department of Health Services
 United States Environmental Protection Agency
 Agency for Toxic Substances and Disease Registry



ATSDR 2008: Development Community Meeting

Using the Action Model, the Development Community established **33 public health measurement indicators** of baseline community health status, such as an inventory of brownfields and incompatibly located sites; pollution of the Baraboo River (sanitary sewers, stormwater, water quality); extent and condition of sidewalks; linkages to the downtown shopping area; recreational use of trails; river access; and many others. Under the stewardship of the City Administrator, these indicators will be tracked over time to assess impacts of redevelopment on community health.

During the data collection phase of the Action Model process (Step 4), changes in indicators were already apparent. A summary is provided below.

Measurement Indicator	Measured Change
Site Inventory and progress of pollution control, demolition, and remediation measures	2 of 10 sites relocated and underwent demolition, assessment, and/or remediation; 1 site removed some physical hazards
Stormwater management	A new biofiltration pond has been created
Sewer system parameters	Since August 2009, 11 cross connections have been repaired
Odor survey of people in a 5-block radius of Veolia waste transfer facility regarding odors	The Veolia facility closed and relocated as of June 30, 2010. A site assessment indicated no site contamination. Odors are no longer present. The lot has been covered with soil fill, and clover to feed livestock will be grown until the site is redeveloped.
Sidewalks survey – number, condition, and extent of sidewalks	Many sidewalk flaws noted during the 2008 survey had been repaired as of June 2010
Trails survey	Trail segments were completed, and flood-damaged sections were repaired. The trail was linked to the Ice Age Trail and trail markers were installed.
Number and types of incompatible land uses	As of June 2010, 2 of 8 incompatible facilities (Veolia and Alliant) were relocating away from the riverfront
People using parks (young people in the area)	Follow-up observations during June 2010 indicated increased usage of parks
Baraboo River access	June 2010 observations showed heavy use of the river at Kiwanis Gazebo Park
Surveillance of recreational activities along Riverwalk Trail and linkages to the downtown square	August 2009, June 2010, and September 2010 observations indicated increased trail use. The Redevelopment Area is linked by sidewalks and parking lots, with ample access provided to the Riverwalk Trail.

Positive Impacts

Quantifying Impacts – A Summary

- ✓ 20% reduction of brownfields sites, with potential to reduce exposures to contamination or hazards
- ✓ Improved river water quality by filtering and trapping stormwater discharge
- ✓ Sewer repair prevents raw sewage from entering the river
- ✓ Removal of waste transfer facility reduces public health hazards and exposures associated with garbage
- ✓ Growing alfalfa contributes to green space and provides economical, healthy feed for livestock
- ✓ Sidewalk maintenance improves recreational opportunities and aesthetics
- ✓ Completion and maintenance of Riverwalk Trail provides increased opportunities for recreation, with associated health benefits
- ✓ Removing or relocating sites led to a 25% decrease in incompatible land uses, with potential to reduce exposures to any contaminants or hazards
- ✓ Parks provide increased opportunities for people to engage in physical activity and social events
- ✓ River access provides increased opportunities for recreation and aesthetic enjoyment
- ✓ Increased use of the Riverwalk Trail indicates recreational amenities and a walkable community, with potential to reduce obesity and reduce reliance on automobiles



For More Information

Contact us by e-mail at:
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Visit our Web site at:
www.atsdr.cdc.gov/sites/brownfields